

# Anchorage Amateur Radio Club

## General Meeting Friday September 4, 1998

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#### Officers

President	Peter Bailey WL7BW
Vice President	Paul Spatzek WL7BF
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#### One Year Board Members

Dianne Hammer NL7KN  
Fred Erickson KL7VC  
John Orella KL7LL  
Richard O'Connor WL7CPG  
Dave Filley WL7CDJ

#### AARC web page & Email contact addresses:

<http://kl7aa.akconnect.com>

president to windsman@alaska.net

webmaster to kl7aa@lawson.akconnect.com

membership to frederickson@iname.com

activities to johnlynn@gci.net

#### News Letter Submissions, Information or corrections:

Submissions must be received 2 weeks before meeting

Email: johnlynn@gci.net Facsimile: 907-338-4791

Mail: 7013 Trafford Ave. Anchorage 99504

#### KL7G CODE PRACTICE SCHEDULE

Schedule: 7:00am, 10:00am, 4:00pm, 7:00pm, 10:00pm  
AK time, every day Frequencies: 3575 KHz and 145.35 MHz  
Sending Speeds: 22 wpm, 15 wpm, 7 wpm

#### Nets in Alaska:

The following nets are active in South-central Alaska:  
Alaska Sniper's Net 3.920 MHz 7:00 PM daily  
Alaska Bush Net 7.093 MHz 8:00 PM daily  
Alaska Motley Net 3.933 Mhz 9:00 PM daily  
Alaska Pacific Emergency Preparedness Net 14.292 MHz 8:30 AM M-F  
QCWA net 146.97/.37 repeater Sundays 8:00 PM local  
850 No Name Net 146.85/.25 repeater Sundays 8:00 PM  
Son of Sideband Net 144.20 USB Mondays 9:00 PM local  
Big City Simplex Net 146.520 FM Tuesdays 8:00 PM local  
ARES net 147.30/.90 Mhz Thursdays at 8:00 PM local  
PARKA net 147.30/.90 Mhz Thursdays at 9:00 PM local

#### Anchorage & Mat Valley Area Repeaters

KL7AA systems at Flattop Mt., 2,200 ft  
146.34/94 Mhz, 80 watts, autopatch, 100/141.3 Hz PL  
223.34/224.94, 25 watts, no patch, no PL  
444.70/449.70, 25 watts, autopatch, 100/141.3 PL  
KL7ION at Mt. Gordon Lyon 4,700 ft  
147.30/90 Mhz - 80 watts, no patch, no PL  
KL7AA, Mt. Alyeska, 2,400 ft.  
146.16/76 Mhz, 25 watts, no patch, 141.3 Hz PL  
KL7CC, Anchorage Hillside, SCRC club  
146.97/.37 Mhz, autopatch, 103.5 Hz PL  
KL7DJE at Grubstake Peak, 4,500 ft.  
147.09/.69 Mhz, 25 watts, no patch, 100 Hz PL  
444.925/449.925, 10 watts, no patch, 141.3 Hz PL  
KL7JFU, Palmer, MARA club  
146.85/.25, autopatch, no PL  
KL7AIR Elmendorf, EARS  
147.27/.87 no patch, 107.2 Hz PL  
KL7G West Anchorage & Events  
449.65/444.65 Mhz, patch, no PL

#### Anchorage & Mat Valley Simplex Frequencies

146.52 Mhz Calling and Emergency frequency  
147.57 / 447.57 (crossband linked) HF spotters & chat  
146.49 Mhz Anchorage area simplex chat  
146.41 Mhz Mat Valley simplex chat



### **This Month's Speaker**

Tim Crawford of Alaska Division of Emergency Services will be demonstrating the First Class email application via packet radio. First Class is the email system used by many state and local agencies for email. It is served by the Division of Emergency Services from the National Guard Armory on Ft. Richardson. The Packet Radio interface makes it portable and accessible by integrating Amateur Radio technology with First Class.

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**EVERYONE IS WELCOME:** You don't need to be a member of the club to attend the meetings or any other AARC events, although we do encourage any non-member to join our group. See THIS MONTH'S EVENTS for the location and time for the meeting and other events.

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### **~~~ 707 LINKS ~~~**

Internet Web links, the favorites from our readers

AARC <http://kl7aa.akconnect.com>

SCRC <http://www.servcom.com/worcester/scrc.htm>

EARS <http://ww2.customcpu.com/kl7air/default.htm>

KL7J <http://www.alaska.net/~buchholz>

Fairbanks AARC:

<http://fidlm1mac.uafsoin.alaska.edu/aarc/aarc.html>

Yukon Amateur Radio Association:

<http://www.klondike.com/yara/index.html>

HAARP Project:

<http://server5550.itd.nrl.navy.mil/projects/haarp/>

Hamradio: <http://www.hamrad.com/>

Solar Terrestrial Activity <http://209.130.27.95/solar/>

ARRL <http://www.arrl.org/>

Propagation Report Recording 566-1819

*please let us know if there are other club pages or good starting points that should appear here*

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### **VHF NETS ABOUND**

All of you new HAMs take note: there are lots of nets and nice folks to visit with. The Son of Sideband Net runs each Monday night at 9:00 PM local on 144.200 Mhz USB with a 6 Meter extension on 50.200 Mhz USB. On Tuesday night, the Big City Simplex Net operates on 146.520 FM at 8:00 PM local. On Thursday the ARES net starts at 8:00 PM on the 147.30/.90 repeater with Amateur News line followed at 9:00 PM by the PARKA net. On Sunday there are two nets at the same time. In Anchorage, the QCWA net runs at 8:00 PM on the 146.97/.37 repeater (103.5 Hz PL) and in the valley the 850 No Name Net runs on the 146.85/.25 repeater. We are starting an informal net during the morning and evening drive times on 146.52 Simplex. All are welcome to check

into what we are calling the "Stuck in Traffic Net". The object is to share traffic information, handle emergency traffic, and have a nice visit on the way to work. Net control will hand off until everyone is at work or safely home.

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**NEWSLETTER ARTICLES;** All articles from members and interested persons are very welcome. If you wish to submit any articles, jokes, cartoons, please have it typed or neatly handwritten. It can be submitted by computer disk, fax, or E-mail to the newsletter editor at the address listed on the cover. Submissions must be in the hands of the editor at least two weeks prior to the meeting.

### **Regular HAM Gatherings:**

\* **Tuesdays, 11:30 AM to 1:00 PM:** Join the gang for lunch and an eyeball QSO at the Royal Fork, Old Seward,

**Saturdays, 7:30 AM:** Here is a great way to get started on the week-end come and meet with some of the locals and have a great breakfast at Phillips Restaurant, at the corner of Arctic and International. Great Fun.

### **ABACUS RADIO REPAIR**

Factory authorized service for: Kenwood, ICOM, Yaesu, Alinco, Amateur radio equipment.

Call Jim Wiley, KL7CC (907) 338-0662

### **THIS MONTH'S EVENTS**

**September 4: AARC general meeting at 7:00 PM** Carr-Gottstein Building APU Campus. Talk in on 146.94 repeater

**September 2: VE License Exams 6:30 PM** Carr-Gottstein Building, APU Campus. Bring photo ID, copy of license (if any) and any certificates of completion.

**September 12: ARES Planning Committee 9:30 AM.** Location to be announced. Everyone welcome. Focusing on preparedness and training.

**September 12: VE License Exams.** Hope Cottage Offices, 540 W. International in the Board Room. At 2:00 PM. Be sure to bring photo ID, copy of license (if any) and any certificates of completion.

**September 11: SCRC general meeting at 7:00 PM** room 220, Business Ed. Bldg., UAA campus. Talk in on 147.57 simplex.

**September 19- 20: HAMfest at Kincaid Park**

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## Upcoming HAMfest

The 27th Annual Alaska Ham-Fest is sponsored by the Anchorage Amateur Radio Club. All interested people are welcome to attend! Gordon West, WB6NOA will be in attendance again this year. It will be held at Kincaid Park on Saturday September 19th starting at 10:00 AM until 5:00 PM and Sunday 10:00 AM until 3:00 PM. On Saturday evening there will be a banquet at the Regal Alaskan Hotel starting at 6:30 PM until 9:00 PM. For more information or banquet tickets, call Rob Wilson at 248-0976.

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## HAM CLASSES BEGIN SEPTEMBER 29th

**HAM CLASSES** will begin **SEPTEMBER 29TH** and run **TUESDAY AND THURSDAY EVENINGS** from **6:00 PM TO 9:00 PM FOR THE FOLLOWING EIGHT WEEKS.**

The location will be the AMERICAN RED CROSS SOUTH-CENTRAL ALASKA CHAPTER BUILDING at 235 EAST 8TH AVENUE (corner of 8th and Cordova). Morse Code classes will be taught by Lil Marvin NL7DL. Theory classes will be taught by Rick Marvin KL7YF. Both classes will run simultaneously.

Students may obtain study materials by contacting Rick or Lil Marvin at 277-6741 or email them at [rlment@alaska.net](mailto:rlment@alaska.net). It is highly advisable that potential students obtain study materials and BEGIN STUDYING WELL IN ADVANCE OF THE BEGINNING OF CLASSES. The more students study in advance, the further ahead they will be when classes begin. This is particularly true of Morse Code classes, which will require a MINIMUM OF 40 HOURS OF PRACTICE in order to pass the Morse Code exam.

It is highly recommended that potential students REGISTER EARLY. Students may register by contacting John Bury KL7QZ at 349-8754 or by contacting Rick and Lil Marvin at the phone number or email listed above.

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## Sixmile PaddleFest Lessons Learned by John Lynn, KL0CY

The Knik Canoers & Kayakers held the Gene Shumar Sixmile Creek PaddleFest on August 15 & 16, 1998. Through the organizational efforts of TJ Sheffield, KL7TS, a group of amateur radio volunteers once again supported the event this year. This article is one of the series called "Lessons Learned" It reports mostly things that we could have done better to support the particular event along with any ideas that really worked well. Amateur radio is really all about volunteering and is the most fun when you are working an event rather than responding to an emergency.

KCK is a fun bunch to work with. We were accepted as part of the group and participated in the set up, cheering on, Saturday night potluck and socializing as well. You must understand that these white water people have a good time even if it is raining, in fact they hardly notice ... If you are interested in kayaking then take a look at <http://www.kck.org>.

This seems to be a core group of regulars that work these events, but everyone is welcome. One of the best ways to learn is by doing. We are always glad to have a second communicator at each location. Since the kayakers all want to be involved in the events, we often need more people to act as spotters and loggers so they can go participate. The HAMs that helped with this event were TJ Sheffield KL7TS, Kent Petty KL5T, Clyde Raymer KL0CW, Susan Woods NL7NN, Bruce McCormick WL7YR, Edie Lynn KL0EO and John Lynn KL0CY. Clyde's wife also can and helped even though she doesn't have a call sign.

Some of the things that we learned follow: It is very important to identify who the key event officials and decision makers are. This is equally important on the day of the event as it is for advance planning. They should lead in the briefing session with all of the communicators present, prior to the event. It is important that all of the crew receive the same briefing. As changes are made, they should be passed to everyone working, ideally through nets control. The HAMs can also facilitate communications among officials to help get good decisions. We saw that it was extremely important for the volunteers and gatekeepers to have a clear understanding of the rules so that the scoring could be done fairly. Often someone who takes the initiative to actually write things out for the officials will be greatly appreciated.

In the fast water, the events ran very quickly. The pattern must be established and followed for reporting. A strong net control is the best way to keep things on track. For all of the events, our net control was in the motor home, not watching the event. There is some discussion as to where the net control should reside. Some favor having it at the start line, but I believe that this is unduly risky. The net control should be in a stable location with higher power and better antenna to support a fall back to simplex operation if needed. Perhaps a better idea is to have an open or free net, where stations can call each other as needed, which is how we handled it much of the time.

The speed race added a new problem to logging. Rather than a staggered start as was done in the previous year, they all started at once. It was very difficult to get times and bib numbers for the finish order with 20 some odd racers in a clump only a few minutes long. One great help was a video camcorder that one of the spectators had. This technique worked so well that I am suggesting that a video camcorder be standard equipment for logging these kind of finishes. The net control did not have to do much for this event.



The rodeo was an interesting event and happened all in one area so radios were not required. The operators were able to watch. There could be some value in spotting other kayakers on the river that would be entering the rodeo area, but there was no problems this time.

The slalom event had a start, ten gates and a finish, all in about 2 minutes for each contestant. We found that it worked best with all gates reporting in order and then the finish line with the end time. To avoid slowing down the event, the gates reported as they were scored without prompting from net control, which simply acknowledged the information by reading it back. Once the event time was reported, then net control would give a ready for the next contestant. The timing would have been impossible without radios. The starter, Kent KL5T would count down and start the contestant with his mic keyed. Kent had to be loud enough to be heard over the river so we heard him easily over the radio. TJ, KL7TS at the finish line would listen on the radio and start the stop watch. He was able to see the finish and stop the watch. He then reported scores for the last 2 gates and the run time. The water was so noisy that headsets were absolutely required. The ones with boom mics were the best, although the speaker mic and headset combination also worked fine.

All record keeping should be done fully on paper. Computer based scoring is fine but a paper trail is absolutely needed if there is any trouble with the computer. The action is typically fast enough that correcting any computer problem would delay the event. The net control or scribe working along with him or her should be logging to paper and reading back results. The readback for confirmations should come from the paper log. A separate person should be working the computer.

Although we are all quick with our call signs, it would have helped to use tactical call signs. We could give or call signs every 10 minutes when cued by net control. The tactical calls allows others, like the logger at net control to know clearly who is where.

The KL7G portable UHF repeater was used for this event and worked very nicely. Kent had the repeater in his truck and moved it to optimize coverage for each event. One lesson from this and other events is that spare keys for all vehicles should be available or in the possession of a second person. In the excitement of an event, twice now in recent memory, the keys have been locked in a truck. Another precaution that would be appropriate is to have simplex capability tested and available for operations in the event that the repeater should fail.

Spare batteries are always appropriate. Original equipment battery packs are pretty pricey so other methods may also be employed. One popular method is to purchase a battery case

for your radio that will hold AA cells. You then have the option of using alkaline batteries or AA size Ni-Cads. External battery packs are also a good approach. I like to use an external pack made from C size Ni-Cads that will usually run a day or more even with heavy use. Gel cells also make an excellent external pack and are generally very reasonably priced. Most modern radios have an input jack for power, but I like to take an dead battery pack, remove the cells and put a cord on it for an external pack. Charging batteries is another issue. At the PaddleFest there was no AC power available for miles. I brought my nice MAHA universal charger which will also run off of 12VDC. I can't say enough good things about these chargers! They will handle almost any Ni-Cad or NMHI battery pack.

Working in the rain and around water almost requires Rite in the Rain paper type waterproof paper. Water based pens should NEVER be used. Their use will result in data loss if the paper gets even slightly damp. As a protective measure we used the small clear wastebasket liner bags over the clip boards to help protect the paper from the rain.

Proper safety equipment should always be part of the communicators equipment. Climbing along the river edge, they should have a life jacket. A good practice would be to match what ever the event participants have for equipment. There may also be additional things that the communicator should have, for instance bug dope and a head net.

Like everything in life, there are always a few hitches, like the stop watches had dead batteries. Someone found a few replacement batteries. A tool bag is also absolutely vital, with small tools, otherwise we would have never been able to change these batteries. . In summary , we had a good time and worked around the problems. Come along and try it, I think you will have fun too.

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**Link Alaska Amateur Radio Club**  
by T.J. Tombleson - KB8JXX

Greetings from the Link Alaska Amateur Radio Network,  
(Formerly known as Link Alaska).

We are working feverishly to upgrade and restore the Anchorage - Fairbanks link before winter. Once it comes back on the air, we will open the Link to some general use, but it will be primarily for those who support the effort to expand the repeater network around the state. As a reminder, the Arctic Amateur Radio Club observes quiet hours from 11 PM to 6 AM, 7 days a week, we ask that the link to Fairbanks not be used during those hours.

We have recently put up a remote receiver for the Northwest end of the Kenai Peninsula about a week ago, which uses a 141.3 Hz tone on the input. We looking to increase the signal



strength of the 146.82 Anchorage repeater to serve them better, however Anchorage still needs the 103.5 tone on the input to work the machine here in town. If there is enough interest in the Kenai / Soldotna area, we could even put in a repeater there instead of leaving them with a weaker Anchorage signal to deal with. We have the site and most of the equipment already, but it will only be worth it, if there are people there who are interested in using it and by getting involved.

There is a good chance that we will be moving the Trapper Creek repeater to a lower elevation site in the Trapper Creek / Talkeetna area before winter, which will reduce it's range, but it will remain a part of the network. There are also plans to put in another 2 meter repeater North of Byer's Lake to provide overlapping 2 meter coverage with the Cantwell - Fairbanks repeater. I'll report back as more details become available.

One other bit of news to pass along to ya. The Yukon Amateur Radio Association recently installed equipment at a site near Beaver Creek Yukon, which will allow users UHF users to access the Entire Yukon (Voice) Linked repeater network from Northway Alaska. The Fairbanks KL7KC Linked repeater system has a repeater there, but is not currently operational. From what I can tell, it will take a bit more equipment to make the Link between Alaska and the Yukon, but I know that the Fairbanks people have shared the same desire to Link to the Yukon system for a while as well, and if they can get up there soon, we just may have all 3 systems tied together in time for winter. Unfortunately the Fairbanks technicians have had some difficulty getting up to some of there sites lately. I understand that the needed helicopter ride has been delayed by bad weather and emergency responses, which have frustrated their efforts to get the needed repairs done on several of their repeater sites. If all goes well, the Fairbanks linked system should be able to join the Yukon system before winter. What that means for us is that since we will also be tied to Fairbanks as well, we will also be able to talk to the folks in VY1 Land, via this long network.

Also check out our new web site at <http://www.alaska.net/~kb8jxx> for more details.

Link Alaska Amateur Radio Club president T.J. Tombleson - KB8JXX For more information please call me at 344-7724 or outside Anchorage call 1-800-784-7724.

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**Guatemala commercializes 70cm**  
*W4ART, Newsline*

Reports from Guatemala indicate that commercial land mobile stations are currently being licensed in the 430-440 MHz band.

This is against International Radio Regulations and because of this, these stations may cause harmful interference to stations in the amateur-satellite service operating between 435-438 MHz.

According to Art Feller, W4ART, Hams experiencing interference from what appears to be a Guatemalan land mobile station should gather as much information as possible about the intruder. This should include the call sign, frequency, emission type, and if possible, the content of the transmission. Also, note the date, time, and call signs of the other amateur station you are attempting to communicating with. Report all of this to your national IARU member society so that a formal complaint may be lodged through appropriate diplomatic channels.

For hams living in the United States, reports go to the ARRL.

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#### **Only Russian spoken on R0MIR** *ARRL Letter*

Now that U.S. astronaut Andy Thomas, KD5CHF, is back on terra firma, amateurs hoping for some Amateur Radio communication with the orbiting outpost had better bone up on their Russian. Thomas was the last U.S. astronaut to live aboard Mir, now slated for an earlier-than-expected de-orbiting.

The remaining crew members aboard Mir are Russian cosmonauts Talgat Musabayev, RO3FT, and Nikolai Budarin, RV3FB, who speak only Russian. "Any message addressed as personal to R0MIR will not be understood by any of the crew members unless it is in Russian," advised MIREX President Dave Larsen, N6CO.

Larsen said MIREX has again opened up the R0MIR-1 digital system for third-party traffic (ie, store-and-forward messages). "This means that you will be able to address messages to other radio amateurs," he explained, but asked Hams to use good judgment in posting messages to R0MIR-1.

"Please use this medium if you have no other e-mail or packet/bbs systems available," he said. Messages must be addressed to a valid amateur call sign. The system uses a Kantronics KPC-9612. Commands are similar to most PBBS and BBS systems.

Meanwhile, Bob Bruninga, WB4APR, reports that he has modified his LIVE MIR Space Station Downlink Web page to capture messages and mail from the R0MIR Mir packet system on 145.958 MHz. Files of the last eight passes, as monitored in Maryland, are available at <http://web.usna.navy.mil/~bruninga/mirex.html>. Bruninga's page also links to a Mir locator at [http://liftoff.msfc.nasa.gov/temp/Mir\\_loc.html](http://liftoff.msfc.nasa.gov/temp/Mir_loc.html)



Larsen said QSLs for R0MIR contact from everywhere except Europe should come to him at PO Box 1501, Pine Grove, CA 95665.

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### **FCC to act on licensing decline** *Newsline, WB6NOA*

Volunteer Examiner Coordinators have learned that the FCC plans to take action to stimulate growth in Amateur Radio.

The FCC appears to believe the decline in Amateur Radio interest and licensing is bad for the service. As a result D'wana Terry, Chief of the Wireless Division, confirmed that the FCC would soon be issuing a Notice of Proposed Rulemaking intended to streamline the service and eliminate any unnecessary rules used in governing Amateur Radio.

Terry told the VECs that she was very limited in what she could say about the NPRM. This is because the FCC is still preparing it. Ms. Terry did say that the recommendation would include both a discussion of current problems and specific proposals on how the FCC plans to deal with them.

No date has been set for the release of this internally generated NPRM. But it could come as early as the end of August, if not before. Once that document is made public, it may not reach every Ham in time to comment. This is because the FCC intends to issue it under the so-called "fast track" initiative.

It's not known if the FCC will allow the sixty days requested by the VECs. As reported last week, this rule making will be under the fast-track. That means expedited handling of it by the Commission.

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Aug. 13, 1998

TO: Northwestern Division Amateur Radio Clubs

FROM: Mary Lou Brown, NM7N

Director, NW Div., ARRL

Newsletter #6

The FCC released the biennial review NPRM (WT Docket No. 98-143) on August 10th. The FCC NPRM can be downloaded from the FCC Web site in Word Perfect 5.1 and Text versions as:  
<http://www.fcc.gov/Bureaus/Wireless/Notices/1998/fcc98183.wp>  
<http://www.fcc.gov/Bureaus/Wireless/Notices/1998/fcc98183.txt> respectively.

We had originally been led to believe that the comment period would be only 30 days even though we had asked for 90 days in order to give the amateurs time to respond. In the end we got even more. The Comment Period goes until Dec.

1, 1998. Instead of the usual 14 day Reply Comment period, that has been extended until Jan. 15, 1999. I would like to urge amateurs to send in their comments on the various aspects of the NPRM (see below). It is our opportunity help make the amateur service what we feel it should be. In making your comments, indicate what you like and what you don't like. Please include your reasons (it will give your comments more impact). Also include anything else you would like to include in the amateur regulations regarding licensing.

The NPRM is both an NPRM and a Notice of Inquiry. In my synopsis below the key parts of the NPRM are first and of the NOI are second. The appendices of the NPRM include the FCC's suggested rewrite of various parts of Part 97. No changes in frequencies or operating privileges are contained in the proposed rules. There is no effort to redistribute the Novice HF frequencies. However, they do request input on this possibility.

WT DOCKET NO. 98-143 - Pertinent parts and comments - numbers refer to paragraphs of the document. The comments are mine and are based mostly on the document and other pertinent factors.

### **NOTICE OF PROPOSED RULE MAKING**

#### **Introduction:**

1. Section 11 requires us to review all our regulations applicable to providers of telecommunications service and determine whether any rule is no longer in the public interest as a result of meaningful economic competition between providers of telecommunications services, and whether such regulations should be deleted or modified. In conjunction with our biennial review of regulations required under Section 11, however, we believe it is appropriate to review all of our regulations relating to administering wireless services, not just those pertaining to providers of telecommunications services, to determine which regulations can be streamlined or eliminated.

**Comment:** Section 11 of the Communications Act of 1996 did NOT require the FCC to review the amateur service.

2. With this Notice of Proposed Rule Making (Notice), we commence a proceeding to examine our rules for the Amateur Radio Service in an effort to eliminate unnecessary and duplicative rules, as well as to streamline our licensing processes.

3. In this Notice, we propose to modify our Amateur Radio Service rules as follows:

**Comments:** Under each item I have tried to extract portions of the document that pertain to the topic of the proposed change. Each change is listed by a capital letter.

A. Reduce the number of license classes from 6 to 4.



11. While we continue to believe there should be a number of license classes sufficient to encourage amateur operators to advance their skills in meaningful ways, six classes of operator licenses may be unnecessary.

12. We believe that the no-code Technician Class operator license has replaced the Novice Class operator license as the entry-level license class of choice. Therefore, we tentatively conclude that the Novice Class operator license no longer serves a significant, useful purpose and should be phased out, with the current holders of Novice Class operator licenses being grandfathered. No new Novice Class licenses would be granted, but anyone currently holding licenses would be permitted to modify or renew their licenses. In addition, Novice Class operators would be eligible for examination credit for the telegraphy requirement for any license class.

**Comment:** The last sentence of the above appears to be an error dating back to the original NPRM (never released) which we believe had only the 5 wpm code exam for any class. Also in Paragraph 13 (see below) they require a Tech Plus to take a 13 or 20 wpm code test to upgrade. This is inconsistent in that the Tech Plus has taken the same 5 wpm test the Novices did.

13. The only difference between the Technician and Technician Plus Classes is that a Technician Plus operator has passed a five words per minute (wpm) telegraphy examination while a Technician Class operator has not. Both Technician and Technician Plus Class licensees predominantly use FM voice and digital packet technologies on the amateur VHF and UHF bands. Yet, the VEs are burdened with preparing and administering telegraphy examinations, and the Commission is burdened with processing the resulting applications and revising the data base. We therefore propose that the Technician Plus Class be phased out. Holders of an FCC-issued Technician Class operator license granted before March 21, 1987, have previously passed the written examination required to qualify for a General Class operator license. Other Technician Plus Class operators could qualify for a General Class operator license by passing written examination Element 3(B) which consists of thirty questions on the additional privileges of a General Class operator license and the 13 or 20 wpm telegraphy examination. We seek comments on this proposal.

**Comment:** From the Appendix there will be four classes of license: Technician (no code), General, Advanced, and Extra. General would be the entry level HF license. The above refers primarily to the new proposed license structure and how the current Technicians plus could upgrade to General Class.

**Comment:** No new Novice or Technician Plus licenses would be issued. Current Novices and Technician Pluses would be able to renew their licenses. The 200 W maximum power output for HF would still be in force. They would be grandfathered with Novice HF privileges. Current Codeless Technicians and any new Technicians after the new Rules

take effect would have to pass a 13 wpm code test and take Element 3B to obtain HF privileges.

**Comment:** Elements 1A (5 wpm code), 2 (Novice written) would no longer be used. Element 3A would consist of 65 questions (combined old Elements 2 and 3A). Under the new system to be a General and get on HF one would need to take a 13 wpm code test. This in effect will become the entry level for HF. (See below regarding the code requirement).

B. Provide greater opportunities to volunteer examiners (VEs) to participate in the examination process.

14. Currently, an Advanced Class operator cannot prepare or administer a telegraphy examination for an examinee for a General Class license. Only an Amateur Extra Class licensee can administer that examination. The ARRL requested in RM-9148 that the Amateur Radio Service rules be amended to permit Advanced Class operators who are VEs to prepare and administer examinations for a General Class operator license. The ARRL argues that this is consistent with the Communications Act and will help fulfill the need for more volunteer examiners. We agree, and therefore propose to authorize Advanced Class operators to prepare and administer examinations for the General Class operator license. In addition, on our own motion, we propose to permit General Class operator licensees to prepare and administer examinations for Technician Class operator licenses. In all cases, examiners will be administering only elements which they themselves have received credit for. These proposals will benefit potential amateur service licensees by having additional volunteer examiners available for the examinations. We seek comment on these proposals.

**Comment:** The part about Advanced class VEs being able to administer General exams is fine. The part about General Class VEs being able to administer Technician Class exams is NOT needed as they already have this privilege.

C. Eliminate Radio Amateur Civil Emergency Service (RACES) licenses because the emergency communications that routinely are transmitted by RACES stations can be transmitted by primary, club or military recreation stations.

16. We propose to phase out RACES station licenses by not renewing them. In addition, we propose to continue the status quo by not issuing any new RACES station licenses. By eliminating the RACES licenses, the Commission is taking a step which not only will conserve the Commission's financial resources, but will also eliminate licensing duplication. It should be emphasized that the same emergency communications that are now transmitted by RACES stations can continue to be transmitted by primary, club or military recreation stations. Our rules permit two types of stations to operate as part of RACES: (1) a licensed RACES station, and (2) any amateur station that has been properly registered with a civil defense organization. Thus, to engage in RACES communications, it is not necessary to have a RACES license with a separate and distinct call sign. We invite comments on this proposal. **Comment:** There



appears to no longer be a need for RACES stations. Amateurs registered with the local Dept. of Emergency Management are authorized to operate during emergencies and disasters.

#### **NOTICE OF INQUIRY**

4. We seek comment on ideas for improving our enforcement processes as they relate to amateur radio.

18. We applaud the ARRL for its creative thinking about ways to improve the Commission's enforcement processes. Its specific proposal, however, appears to be inconsistent with the statutory provisions governing the role of administrative law judges. Specifically, the assignment of duties to ALJs must be consistent with their duties and responsibilities as they relate to conducting formal hearing proceedings. Accordingly, while we do not seek comment on ARRL's specific proposal, we do seek comment, consistent with the ARRL's underlying concerns, on other ideas for improving our enforcement processes as they relate to amateur radio. One possibility, for example, would be to encourage or require persons bringing complaints of interference to the Commission to include a draft order to show cause to initiate a revocation or cease and desist hearing proceeding. We also request additional comments and suggestions on how we could better utilize the services of the Amateur Auxiliary, consistent with its statutory basis.

**Comment:** At one point in time, our discussions with people at the FCC indicated a more favorable climate for our proposal. Obviously, our request has now been rejected. On the other hand, the climate regarding enforcement has changed recently and we are working closely with the FCC regarding some of the more serious cases. The above idea of the FCC to have persons bringing complaints of interference to include a draft order to show cause, is probably not workable. Proper submittals would probably require a communications lawyer to write such. Then again would it be in the form required by the FCC. Certainly, our OOs do not have such training. This is a GOOD opportunity to express your ideas about enforcement of regulations.

5. We also seek comment on changes to the telegraphy requirements for the amateur radio service and to the written examinations that must be passed to qualify for an amateur radio license. (This is definitely a Notice of Inquiry)

24. In view of changes in the technologies that amateurs use to communicate generally, and views with regard to the Morse code requirement specifically, we seek comment on all aspects of the Morse code standards used in our examinations. Do the three levels of 5, 13, and 20 wpm remain relevant to today's communications practices? Should we continue to have three different levels, or should these be reduced to one or two -- and, if so, what should be the required speeds? Were we to reduce the required Morse code elements, should we add elements to the written examination to ensure a working knowledge of the newer digital technologies which, in part, are replacing the Morse code? Or, should we consider specifying the method of examining

for Morse code proficiency, such as requiring fill-in-the-blank or copying one out of five minutes sent, instead of allowing VEs to determine how to test for code speed? We request comment on these and any other issues related to our code speed requirements.

**Comment:** Judging from the e-mail I have been receiving, this is probably the most discussed of the licensing requirements. By all means, please make the FCC aware of your preferences and why you feel the way you do. It would probably be most productive to place the CW requirements in the context of a four class system. Remember to be on HF one must have passed a CW test (an international treaty requires a code test to operate below 30 MHz).

26. In light of the fact that written examinations now have been prepared and administered under the VE system for over a decade, we seek comment on whether the written examination requirements should be modified to provide VEs and VECs additional flexibility in determining the specific contents of written examinations, on the specifics of what such flexibility should entail, and on the advantages and disadvantages to providing such flexibility.

27. Specifically, we ask commenters to address whether the general topics set forth in Section 97.503 of the Commission's Rules adequately cover the significant categories of information relevant to determining whether an applicant has the requisite operational and technical qualifications to become an amateur licensee. For example, does the current list of topics adequately cover current technology and contemporary amateur operating practices? For those commenters who suggest addition or deletion of general topics, we ask them to include the rationale underlying such proposals. In addition, we ask commenters to discuss whether the required number of questions from each general topic should continue to be established by rule. For those commenters who suggest altering the number of questions, we ask that they discuss alternative numbers or percentages and the reasons therefor. We are particularly interested in comments from VEs and VECs regarding any changes they would recommend, either individually or collectively, in the written examination requirements on the amateur community generally, as well as on the amateur examination process specifically, including how, if at all, they will affect the integrity of the examination and licensing process. For instance, we seek specific comment from VEs and VECs regarding how modifications to the written examination requirements would affect their ability to conduct examinations in an effective, efficient and expeditious manner.

**Comment:** The second most prevalent comment I received in e-mail on licensing related to a "dumbing down" of amateur radio. A lot of the comments were directed at the exams. Many felt that printing the a,b,c,d, along with the questions in the pool resulted in a test of memory rather than understanding of the principles. At one time a,b,c,d's were not printed with the question pool. Other comments



indicated that the content of each test should relate to the privileges of the license class being tested. In other words Technicians would not need to know about HF and HF propagation, etc., but would need to know about the modes and propagation of the VHF/UHF bands. For classes permitted to use digital modes, ATV, etc., there should be questions on those aspects. Take a look in your Part 97 and see what you think about the number of questions for each topic (97.503 c). For Technician class element 3A would include 65 questions, the current element 2 and 3A. There are many other details of the proposal, but I think the above hits the main meat of the FCC's NPRM.

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**ARRL reiterates stance on LMCC petition**  
*Worldradio*

The ARRL has called upon the Land Mobile Communications Council (LMCC) to withdraw its request for reallocation of segments of the 420 to 450 Mhz band to the Private Mobile Radio Service. Such a move would permit the FCC to focus its attention on portions of the LMCC petition that "might have more merit," the ARRL said. The League's suggestion is contained in reply comments filed July 16th with the FCC in response to the LMCC's petition for rulemaking, RM-9267, filed earlier this year.

Amateur Radio Shares the 70cm band on a secondary basis with the federal government. The LMCC seeks immediate reallocation of the segments 420 to 430 and 440-450 Mhz from the federal government to the PMRS.

Alternatively, the League asked that the FCC dismiss those portions of the LMCC petition dealing with the 420 to 450 Mhz band as "plainly not deserving of further consideration."

The League said that comments from Amateur Radio operators-the vast majority of those filed in response to the LMCC petition-establish that the LMCC proposed for a PMRS allocation in the 70cm band "was ill-conceived." Hams told the FCC that the band is heavily used and vital to amateur public service activities. The League noted among other commentaries "a complete absence of support" for the 420 to 450 Mhz proposal in particular. Some commentaries were altogether silent on the 420 to 450 Mhz reallocation issue, while one LMCC member, the Association of Public Safety Communications Officials-International (APCO), opposed any reallocation in the band.

The League urged the FCC to pay close heed to the comments of the National Telecommunications and Information Administration. The NTIA said national security and other federal interests would preclude sharing on the band. Those comments, the League noted, were "clearly protective of its own use of the 420-450 Mhz band, and that of the Amateur Service as well."

The League said the LMCC has failed to justify a 420 to 450 Mhz reallocation. Comments filed so far, the ARRL said, disprove both the LMCC's "rank speculation" about possible federal reductions in the use of 420 to 450 Mhz as well as its representations about amateur use of the band.

"The record that has been developed shows that there is no compatibility between incumbent Federal and amateur facilities and new PMRS facilities," the League said. But the ARRL said it has no quarrel with the LMCC to the extent that it seeks to open discussion on the general issue of PMRS allocation needs.

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**ICOM donation**  
*from Newsline*

ICOM has donated an IC-706MkII transceiver and an AH-4 automatic antenna tuner that will be used to establish a club station for South African youth. This is part of a government initiative to interest young people in technical activities and careers. The transceiver was on display at the IARU booth during the ITU-sponsored African Telecom 98 in Johannesburg.

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**HAMs help in Florida fires**

*Norm Lauterette, WA4HYJ; Mike Welch, KF4HFC; Carla Sikorsky, KF4FRE*

**ARES/RACES kept active**

During the weekend of June 6th and 7th, wildfires spawned by more than three months of drought spread over four central Florida counties of Flagler, Seminole, Brevard and Lake. With no forecast of rain in sight, more fires will continue to erupt. Who would have imagined it? Less than four months ago Central Florida ARES/RACES units were activated to hardly county communication needs for the worst tornadoes and floods this area has seen. Now it's wildfires, and hurricane season is just starting.

In Flagler County, fire consumed 1,650 acres, destroyed 19 homes and damaged others. Sections of Interstate 95 were closed due to intense smoke and fire that leaped across the interstate fanned by high winds. The American Red Cross activated a shelter at Bunnell Elementary School with Amateur Radio support. The Lake and Brevard County fires consumed large forest areas but residential damage was kept to a minimum.

Seminole County Emergency Management declared a state of emergency Saturday evening around 1830 (EDT), Dick Fess, EC of Seminole County, ARES/RACES activated the call up. The American Red Cross opened a shelter at Geneva Elementary School, close to the fire zone. Bob Wendoth, KS4CI, and Norm Lauterette, WA4HYJ, set up the initial station in the Emergency Management command post at the shelter. Seminole County ARES/RACES emergency net was activated at 1900 hours (EDT).

Close to 300 residents were evacuated from the 1,800 acre Geneva fire zone. County helicopters were used to direct fire control and evacuate trapped residents surrounded by fire pockets created by the shifting winds. Approximately



56 evacuees took refuge in the shelter and stayed Saturday night, others stayed with friends or in motels. Families were split up and several residents were listed as missing. Condition of loved ones, pets, livestock, homes and property were the main concerns of officials and evacuees.

Emergency Management did a great job keeping evacuees apprised of conditions Saturday night but many feared everything was gone. The ARES/RACES Amateur Radio direct communication link to the EOC was very valuable during this time period.

Firefighters gained control around 2400 (EDT). Emergency Management and the Sheriff's Office allowed drivers of official vehicles to transport selected residents to their home sites to determine the status of their property. All were returned to the shelter.

Rescue dog handler Allen Wilson, WB7BCI, remained at the shelter most of the night ready to assist if partner "Duke" was needed.

Relief ARES/RACES operators picked up operations at 0500 (EDT) and handled traffic with the EOC. The primary activity at the shelter Sunday was "Medical transport" of residents to their property to retrieve medicine and care for pets and livestock. Those at the shelter were kept up to date on conditions by Emergency Management and the Sheriff's Office.

At 1700 (EDT), Emergency Management allowed most of the evacuees to return to their homes. Our local ARRL PIO team had the opportunity to gather additional information and Carla Sikorsky, KF4FRE, snapped some photos of the fire zone.

More than 30 structures, including 15 homes and 24 vehicles were destroyed in the Geneva wildfire. A total of 54 homes and structures were destroyed in the four Central Florida fires. Seminole County ARES/RACES recorded 17 amateurs who volunteered their services for a total of 119 hours - a job well done and one noticed by the many county officials on the scene.

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#### **FCC proposes 5.9 Ghz allocation**

**Jack Kelleher, W4ZC**

The FCC has proposed allocating 5.850 to 5.925 Ghz for use by intelligent transportation systems (ITS). The June 11th NPRM was in response to a rulemaking petition from the Intelligent Transportation Society of America (ITS America), who said the band is optimal for DSRC on the basis of propagation, consistency with international allocations, and compatibility with existing users.

The Amateur Service has a secondary allocation at 5.650 to 5.925 Ghz with government radar systems and non government fixed satellite service uplinks. Under the proposal, dedicated short range communications (DSRC) highway safety systems would share the band as coprimary users.

The FCC seeks comments on the need for nation wide operational standards and channelization and on the potential for DSRC operations to share with other services.

ITS America, a nonprofit organization dedicated promoting ITS, has worked with the ARRL and others to develop a sharing plan. The League has said it is prepared to work with ITS entities to resolve spectrum sharing issues.

In its comments,, the ARRL questioned whether the 5.9 Ghz band was appropriate for DSRC and urged the FCC to look into frequencies above 40 Ghz, where DSRC systems could avoid interference from other users. The League said the ITS proposal and the FCC decision to deploy unlicensed National Information Infrastructure (U-NII) devices in the band could render 175 Mhz of spectrum in the 5.8 Ghz range significantly less useful to hams.

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#### **FCC to tighten scanner rules**

**Newsline**

The FCC plans to further tighten its rules on scanning receivers to prevent reception on cellular telephone frequencies. In a rulemaking notice released on June 3rd, ET Docket 98-76, the FCC proposed to require receiver filtering adequate to prevent cell phone reception even when the receiver is tuned to frequencies outside the cellular telephone bands, such as an image frequency. To prevent modification of legal receivers to receive cellular frequencies, the FCC wants scanning receivers designed so that the tuning a control circuitry is "completely inaccessible," and that attempts to modify the receiver "will likely render the equipment inoperable." The proposed rules also would prohibit scanner kits.

The FCC said the proposals were in response to a petition (RM-9022) from Uniden American Corporation, which manufactures both cellular telephones and scanners.

The proposed rules would affect Amateur Radio equipment that includes scanning capability, as defined in the FCC rules. The FCC has invited comments on whether it should modify its definition of a scanning receiver to include units that can be manually tuned or which automatically switch among fewer than four frequencies.

The FCC wants to require that scanners provide at least 38 dB of rejection for cell band signals at any frequency the receiver can tune. The FCC also proposes that scanners be unable to receive a signal level of 5mV/meter or less in the cell band at any tunable frequency.

The FCC suggested covering control and tuning circuits with epoxy or some other substance, or encasing them in a non-removable metal compartment, to make them impossible to access and modify. The Commission also plans to ban the import or manufacture of scanning receiver and converter kits capable of receiving cellular frequencies. Test equipment would be exempted from the definition of a scanning receiver, however.



The FCC also proposed modifying the rules to make it clear that modification of scanning receivers on a substantial scale to receive cellular frequencies would be the same as manufacturing, which already is illegal. The FCC took the opportunity to point out that it's still illegal to modify receivers imported or manufactured prior to the effective date of the current scanning receiver rules those rules became effective on April 26, 1994.

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#### **KH6HME 2mtr and 70 cm heard in California** *Newsline*

The 2 meter and 432 Mhz KH6HME propagation beacons have been intermittently heard in California. Paul Leib, who owns the Hawaiian beacons bearing his call would like to hear from anyone if the band opens up. If it does and if he has the time, he is willing to drive to his 8,000 foot perch on the volcano and try for stateside contacts.

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#### **Human exposure to RF fields - the simple explanation** *Bill Pasternak, WA6ITF*

It's no secret that most Hams really do not understand the new FCC rules regarding human RF exposure limits to electromagnetic fields. You need only bring the subject up on your local repeater to find numerous radio amateurs freely admitting they don't understand the new regulations nor are they adept at making the necessary calculations even if they did.

I was involved in a telephone discussion of this problem with my friend Roy Neal, K6DUE. Both of us realized the government has mandated that Hams comply with the new regulations and has made a lot of good data available to the Amateur Radio community. We also realized that without mandatory retesting in the area of these new regulations of every currently licensed Ham probably would not take the time to locate, and read-let alone understand the new laws.

I was talking about the situation with some Amateurs very knowledgeable in the area of human RF exposure limits at work, when it occurred to me that there might be a person who could shed some simple, non-bureaucratic words on this matter. Robert Gonsee, W6VT, is the president of an internationally recognized and well-respected broadcast consulting firm called Communications General Corporation located in Fellbrook, California.

Bob is the son of the late Faust Gonsett, the man considered the father of VHF transceiver technology. The senior Gonsett was responsible for such legendary pieces of Ham gear as the Gonsett Communicator I and II with their ever-watchful "green magic eye" turning indicators; the Communicator (the East-Coast Ham community nicknamed the "gooney-box") the powerful-for-its-time G-50 6M VFO

controlled home station, plus myriad other gear that we Hams of the late '50s though the early '70s used and enjoyed.

Most important, one of the things that Bob Gonsett does quite well is to "communicate" with those around him. To assist in that mission, Bob writes and publishes a weekly (sometimes twice weekly) e-mail newsletter known as the CGC Communicator. Not a week goes by when I do not find an item of importance in the CGC Communicator.

After discussing this matter a second time with Roy, I wrote a quick note from both of us to Bob asking if he could use his technical writing skill to help defray the Washington bureaucratese with some simple and sound advice. I shipped the note via cyberspace, and in short order I received the following response:

"A short story for human exposure to radio frequency electromagnetic fields caused by Ham radio operations might go like this:

1. Are you delivering less than 50 watts PEP to your antenna? If so, you almost certainly comply with the FCC's new human exposure to radio frequency electromagnetic field rules, also known as the "REF Rules." 50 watts is the magic number determined by the FCC.

2. If you put more than 50 watts PEP into your antenna, your operation will probably still comply with REF Rules if it fits within the power limits of Table 1 of Supplement B of FCC publication OET-65. This table, widely available to Hams, permits up to 500 watts PEP on some HF Ham bands and as little as 50 watts PEP on others. Check the chart to see just where you stand.

3. If your operation is beyond what is permitted by the chart, it might still comply, but expert help is sometimes needed to make this determination. You've got to consider things like the height and type of antenna, the antenna's proximity to people in worst-case situations, the type of modulation and the duty cycle of the transmitter. Tap the Ham resources in your community for help.

Remember that RF waves are like heat waves. It is the combined "heating effect" from all RF sources that counts, not the effect of your operation alone. For example, if you live next door to a high power operator, some of the "warming effects" of his signal will add to the warmth of your signal. People standing on the ground in just the right places could be overexposed and that could lead to legal trouble.

The bottom line is this: If you put less than 50 watts of peak power into your antenna, you will almost always comply with the REF Rules even if you have a "big gun" station next door. If you run more than 50 watts and especially if there are other strong transmitters nearby, check the FCC publications or ask the experts in your area for help.

Most Hams already comply with the REF Rules but simply don't know it. Keeping your power below 50 watts is one quick and easy way to comply.

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a report from John Lynn

Last month's PARKA meeting was devoted to discussion about where we are with ARES and disaster preparedness and where we would like to go from here. A regular meeting for ARES planning has been established on each second Saturday of each month at 9:30 AM. This meeting will finish before lunch. Note that the VE exams fall on each second Saturday at 2:00 PM in the afternoon. This committee is not affiliated with any particular club and all HAMs are encouraged to participate without regard to club membership. If you plan to attend please email [John\\_Lynn@ak-prepared.com](mailto:John_Lynn@ak-prepared.com) or leave a message at 337-1091 so that we can make sure that there is enough room and copies of material. This month's meeting will be on September 12 and if you plan to attend please advise by Monday the 7th.

73 de KL0CY